

REMARKS

The present invention relates to a process for making a shaped product from thermoplastic polycarbonate. The process entails producing polycarbonate melt by any of the known "phase interface" or "melt transesterification" processes and introducing the melt directly into an injection molding machine. Key characteristic of the invention is the exclusion of polycarbonate in granular form. Unlike the conventional process for making products by injection molding where the polycarbonate melt is first pelletized and then re-melted before molding, the present process avoids the re-melting. Excluding the re-melting yields molded articles exhibiting higher quality.

Clearly, the claimed process that requires introducing polycarbonate in the melt directly from its production stage to the stage where it is formed by injection molding may be practiced only where the production and forming are integrated. Such integration avoids the intermediate conventional step of granulating the polycarbonate and transporting it in solid, granular form to an injection molding stage.

The claims stand rejected under 35 U.S.C. 102(b) said to be anticipated by U.S. Patent 5,308,558 to Woldenberg et al ("Woldenberg").

The standard for anticipation is one of strict identity. To anticipate a claim for a patent, a single prior art document must contain all the essential elements of the claimed invention. See *In Re Donohue* 226 USPQ 619.

Woldenberg disclosed a process for foaming thermoplastic polycarbonate. Accordingly, polycarbonate is mixed with an aluminum compound and the resulting mixture is injection molded without the application of vacuum to produce a foamed article.

Nowhere in Woldenberg is a process disclosed whereby polycarbonate is introduced directly from its process of preparation and in the melt to an injection molding machine, avoiding a granulation step. To the contrary, Woldenberg disclosed - column 6, lines 18 et seq. - that mixing of the polycarbonate and aluminum compound may be carried out at room temperature. The thus formed mixture is used - column 4, lines 27-36 - in forming molded articles in an injection

molding machine. Attention is called to that the mixture is formed at room temperature, a condition that precludes polycarbonate in the molten state.

Woldenberg has been pointed by the Examiner to containing anticipatory text as follows:

The text in Column 3 lines 64-68 refers to the preparation of polyester carbonate by any of the interfacial process or the solvent free transesterification process. These known processes for the preparation of polycarbonates correspond to the presently claimed "phase interface" and "melt transesterification".

In column 4 lines 27-39 the text refers to foaming polycarbonate that contains conventional additives in accordance with which after the addition of conventional additives and mixing with the claimed aluminum compound, the resulting mixture is introduced to the injection molding machine. This addition of additives does not describe the presently claimed "direct" introduction of the melt to the machine.

Woldenberg cannot reasonably be said to disclose the key characteristic of the claimed process, namely the introducing of polycarbonate in the melt to the injection molding machine.

The rejection alleging anticipation is clearly untenable and its reconsideration and retraction are requested.

Instant Claim 2 is directed to an embodiment of the inventive process whereby the melt that is directly introduced to the injection molding machine is degassed.

Claim 2 stands rejected under 35 U.S.C. 103(a) said to be unpatentable over Woldenberg in view of U.S. Patent 6,265,533 to Regel et al. ("Regel").

Regel disclosed a process for increasing the molecular weight of polyesters by adding an organic phosphate to a processing apparatus and fusing the mixture to above the melting point, and where the apparatus has at least one vent zone to which underpressure is applied.

Woldenberg has been discussed above and its shortcoming in the present context noted.

There is nothing in Regel that may reasonably augment Woldenberg in a presently meaningful manner.

Reconsideration and withdrawal of the rejection over Woldenberg in view of Regel are solicited.

Believing the above represent a complete response to the Office Action and that the application is in condition for allowance, Applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By



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